



Radio Science in Africa

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Radio science activities covered by URSI (International Radio Science Union) are briefly reviewed. They encompass the knowledge and study of all aspects of electromagnetic fields and waves in a wide frequency range running from micro pulsation frequencies (i.e. from ~ 1 mHz) to Terahertz. The topics include: electromagnetic measurements and standards, electromagnetic theory and applications, radio-communication systems and signal processing, electronics and Photonics, electromagnetic environment and interference, wave propagation and remote sensing, ionospheric radio and propagation, waves in plasmas, radio astronomy, and electromagnetics in biology and medicine. The main radio science activities conducted by the URSI national Committees of South Africa, Egypt and Nigeria, and by African radio scientists groups gathered in GIRGEA (Groupe International de Recherche en Géophysique Europe Afrique) are reviewed. The emphasis is put on the activities developed in the context of the IHY programme and of the SCINDA network for forecasting ionospheric irregularities that adversely impact communication and navigation systems in the low latitude regions.